

FIG. 1B is a block diagram of a Distributed Risk Assessment System 130. The system 130 includes a SERVER SYSTEM 132 and a CLIENT 134. The SERVER SYSTEM 132 includes a PROFILING ENGINE 140, a CLUSTERING ENGINE 142, a TRANSACTION PROFILE DATABASE 146a, a LOCATION/FRAUD PROFILE DATABASE 146b, a KEY COMPRESSION TABLE 148a, a TRANSACTION COMPRESSION TABLE 148b, a REPLICATION ENGINE 160, a REPLICATOR CENTRAL DB 162, an OPERATIONS INTERFACE 174, and a CONTROL DATABASE 178. The CLIENT 134 includes a LOCAL ENGINE 182, a KEY ENGINE 164, and a REPLICATED DATABASE 166. The system 130 also includes TRANSACTIONAL INFORMATIONAL SOURCES 138, which include BASE I 138a and BASE II 138b. The system 130 is connected to a TRANSACTION ENGINE 172 and an OPERATIONS SUPPORT 176.

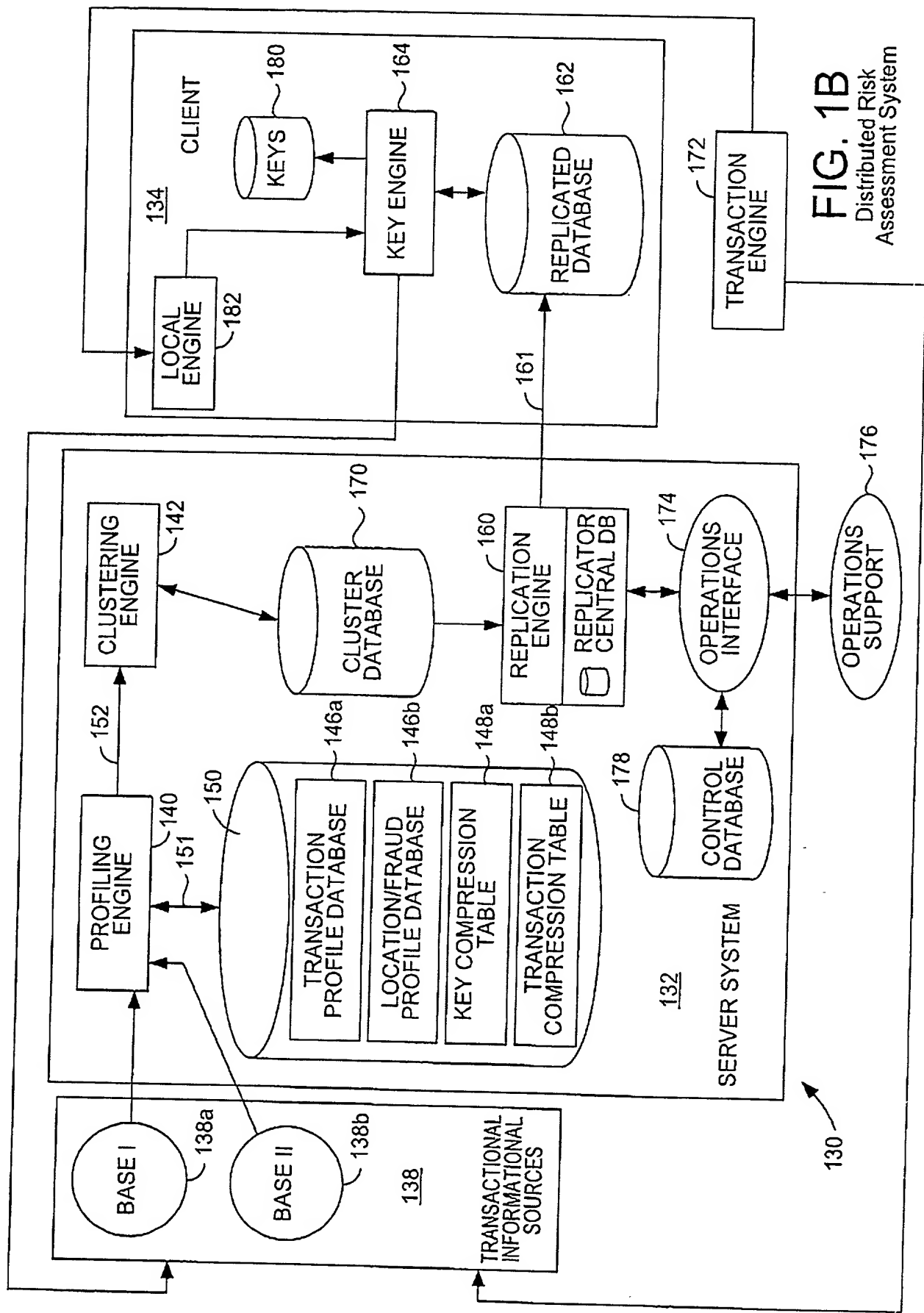


FIG. 1B
Distributed Risk
Assessment System

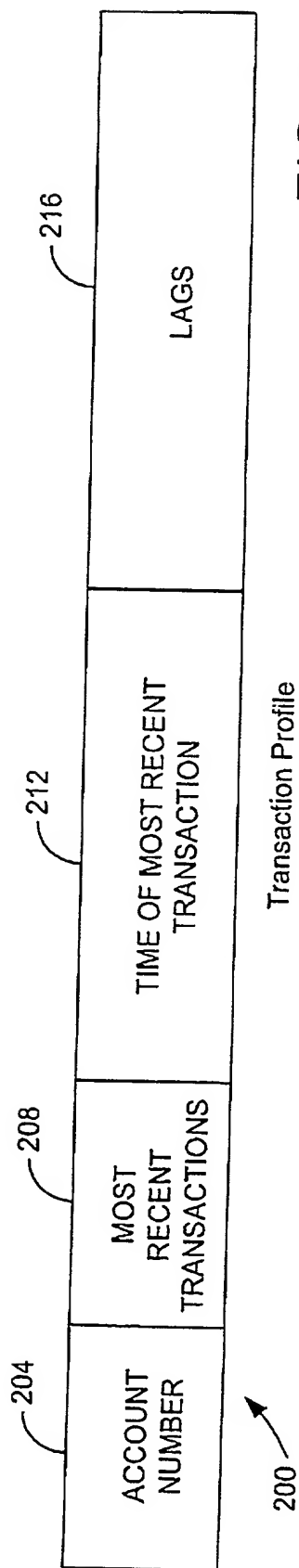


FIG. 2

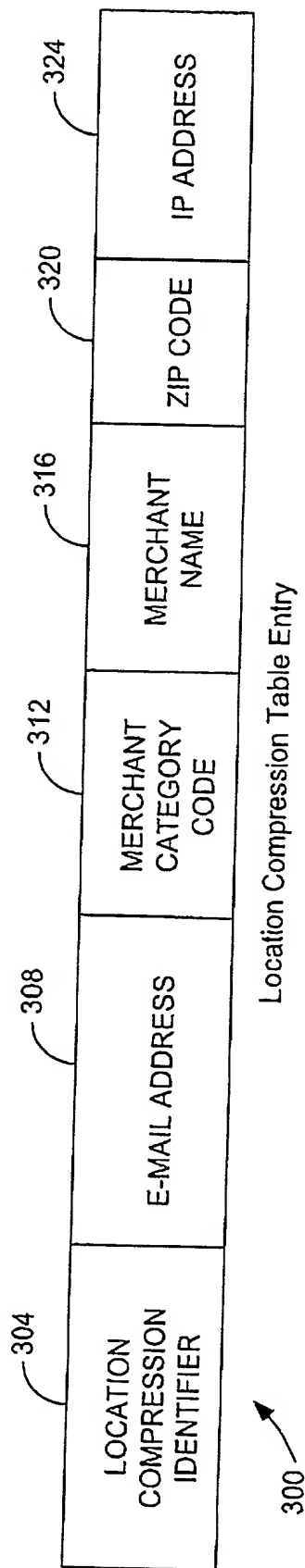


FIG. 3

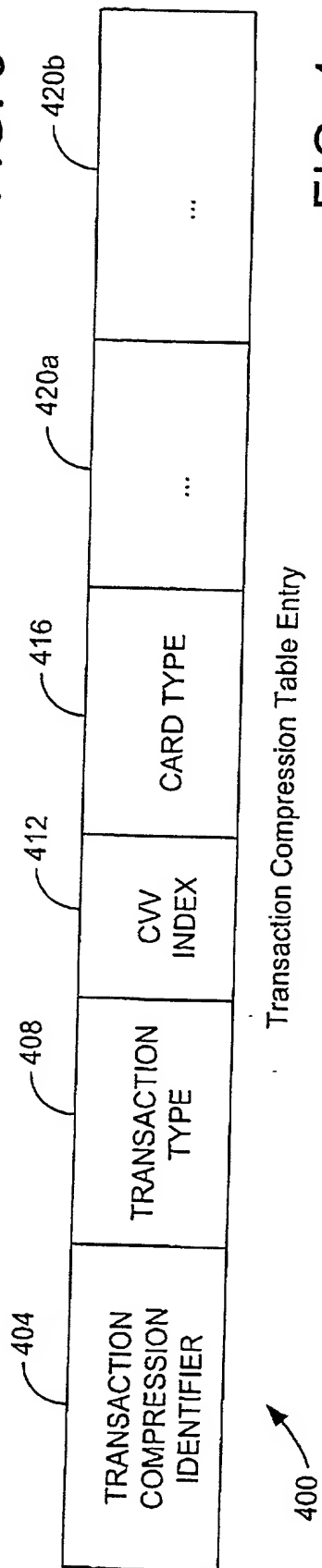


FIG. 4

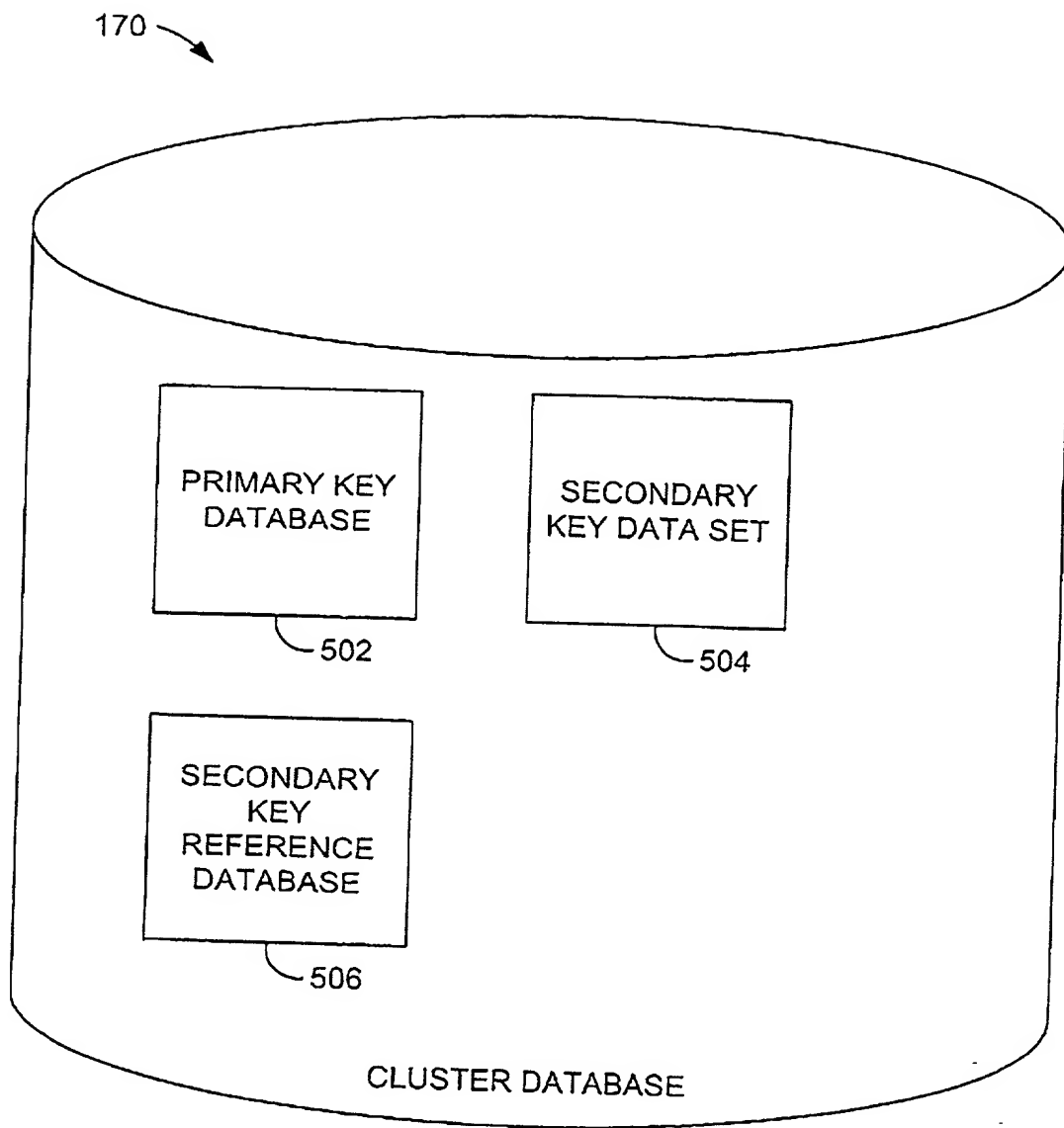


FIG. 5

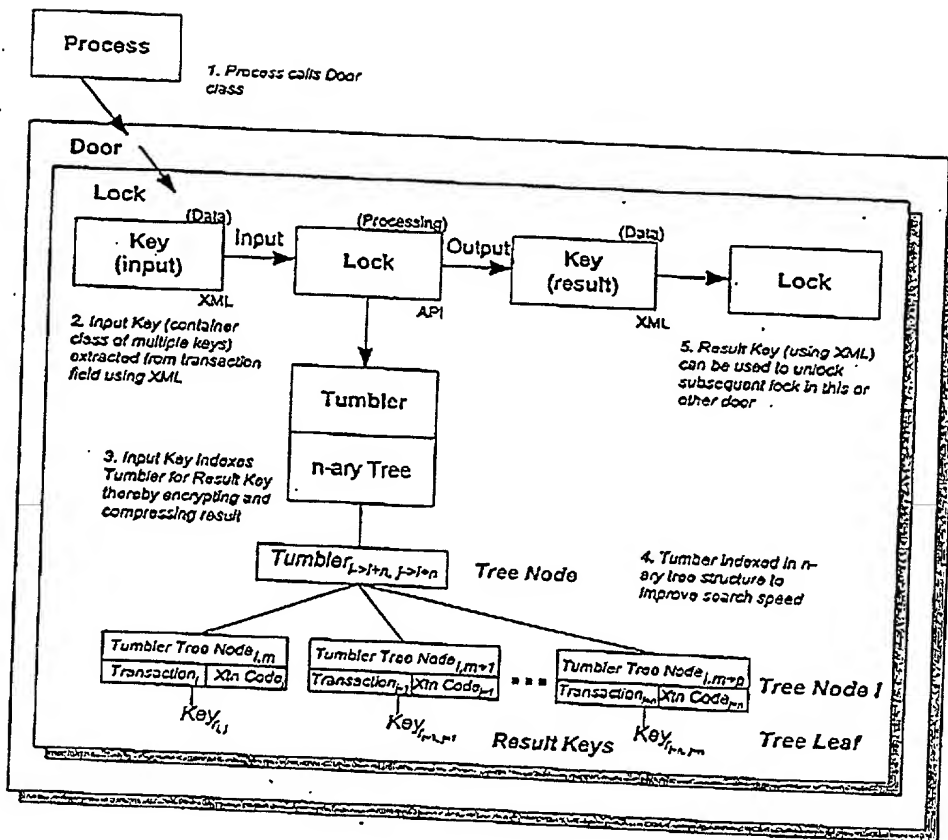


FIG. 6A

Cryptmatics Framework

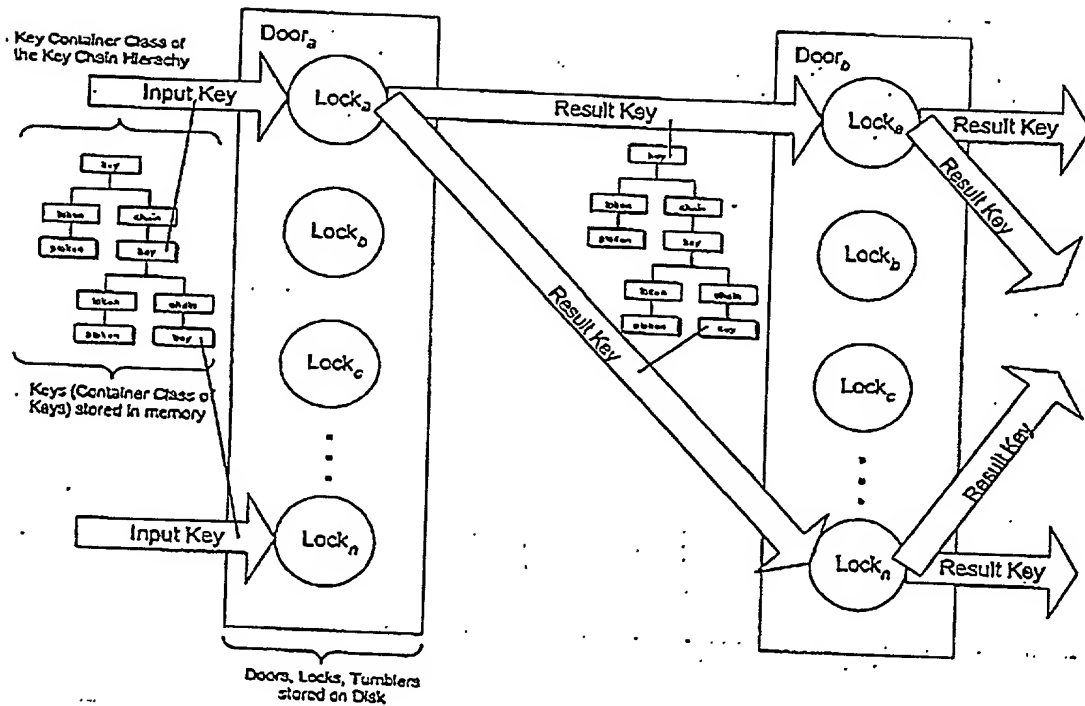


FIG. 6B

Key, Door and Lock Relationships

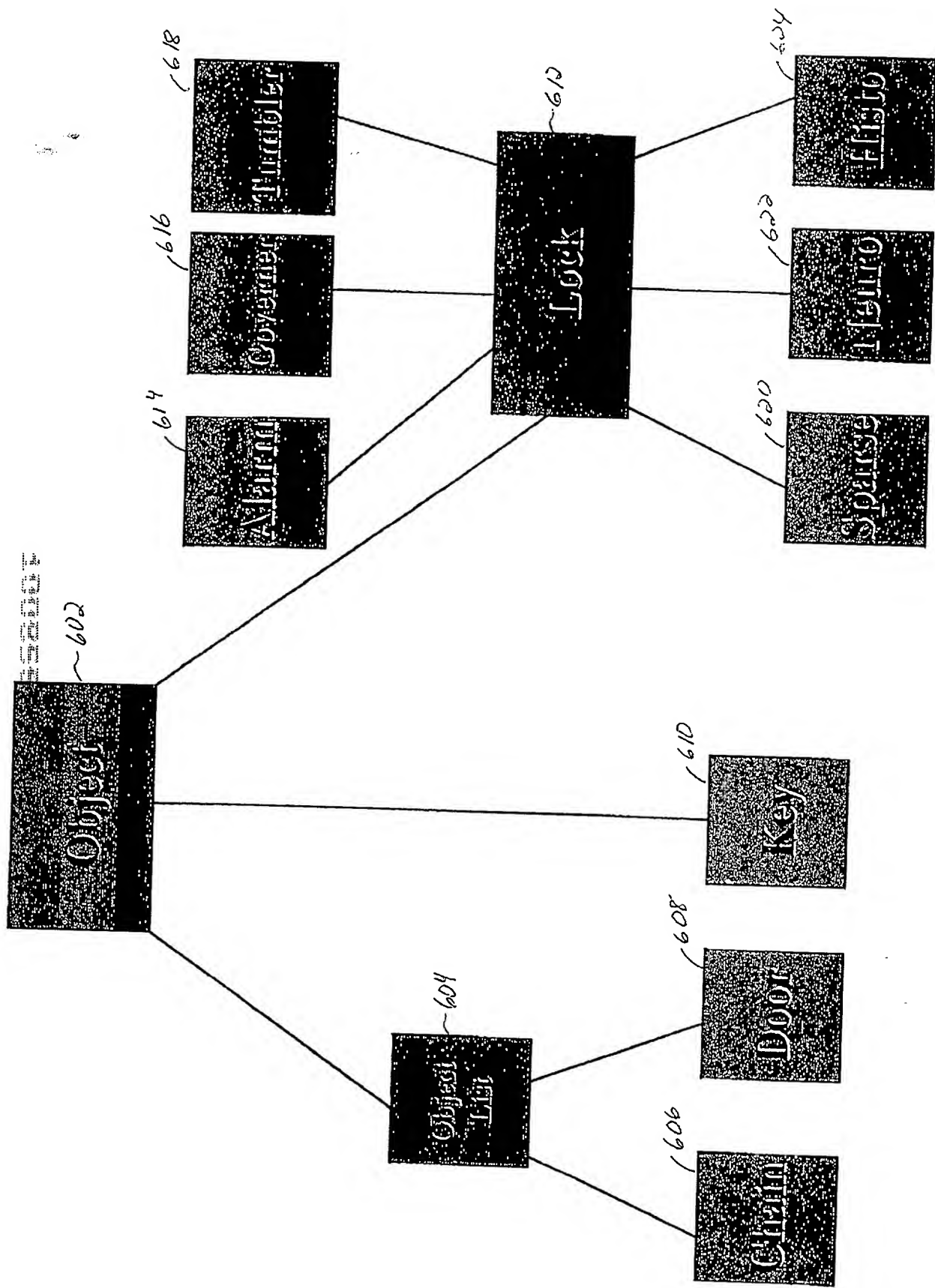


FIG. 6C

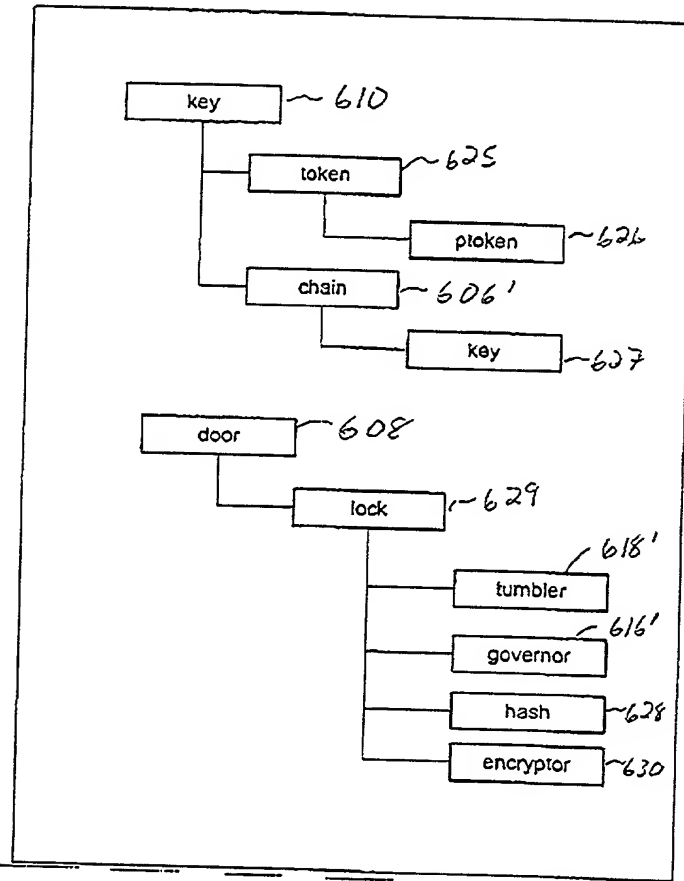


FIG. 6D

FIG. 6E is a block diagram of a system for processing sample volume data. The system includes a sample volume file 634, a key 636, a sort 640, a frequency 638a, a cluster table 646, and a count 642. The sample volume file 634 is divided into three sections: T1, T2, and T3. The key 636 is associated with the T1 section. The sort 640 is applied to the T1, T2, and T3 sections. The frequency 638a is calculated for the T1 section. The cluster table 646 is used to map the T1, T2, and T3 sections to the count 642.

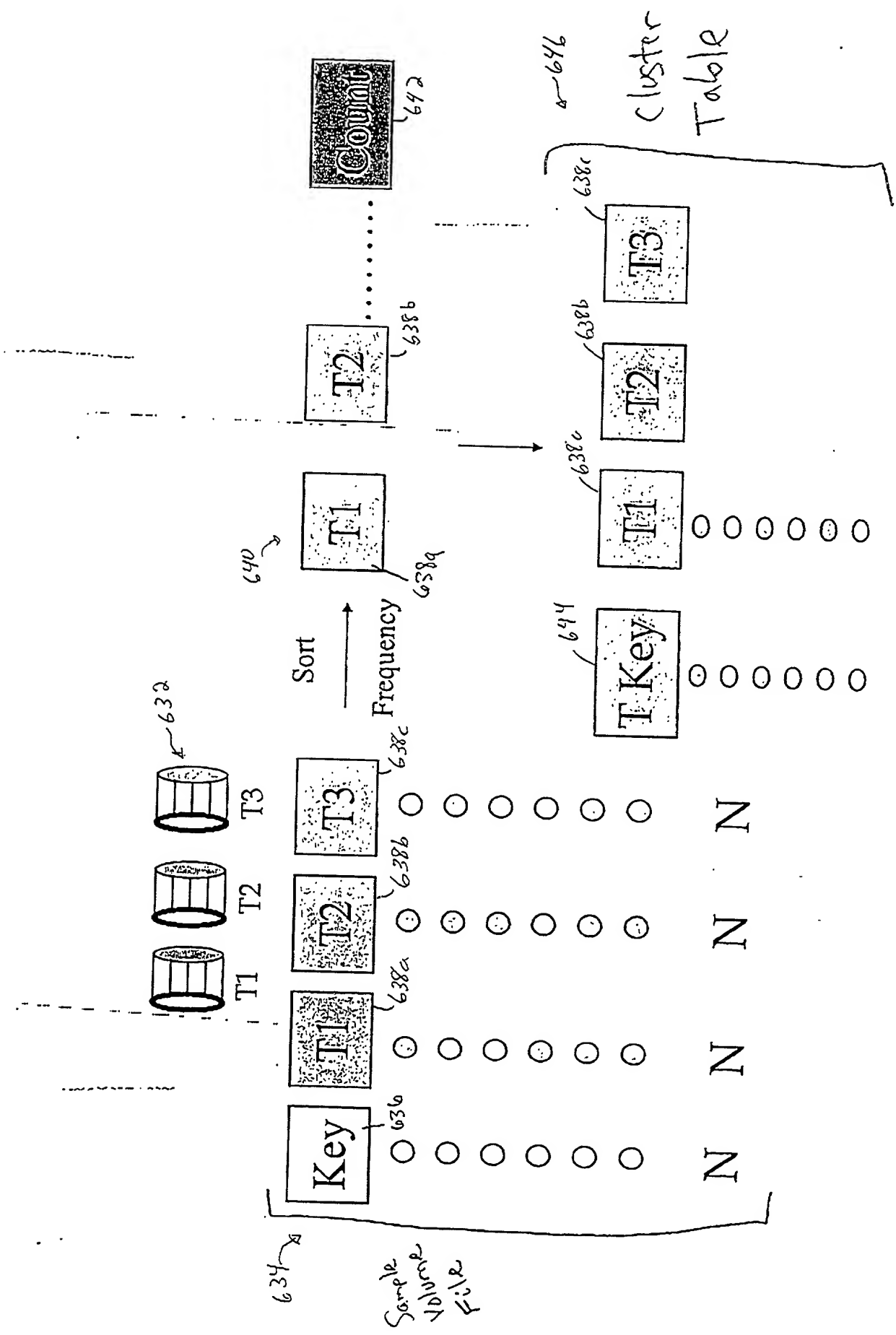


FIG. 6E

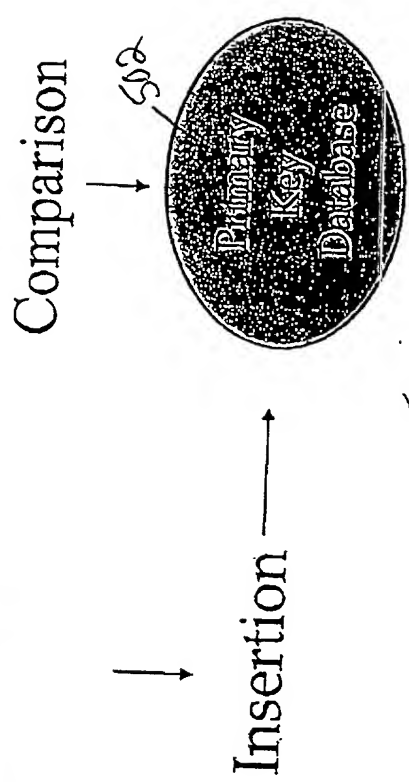
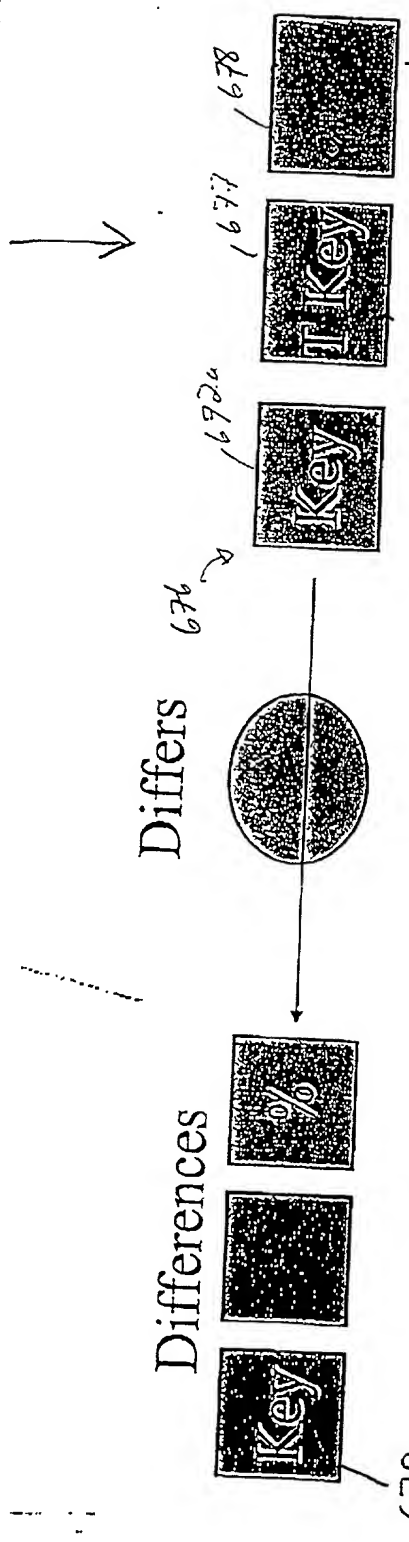
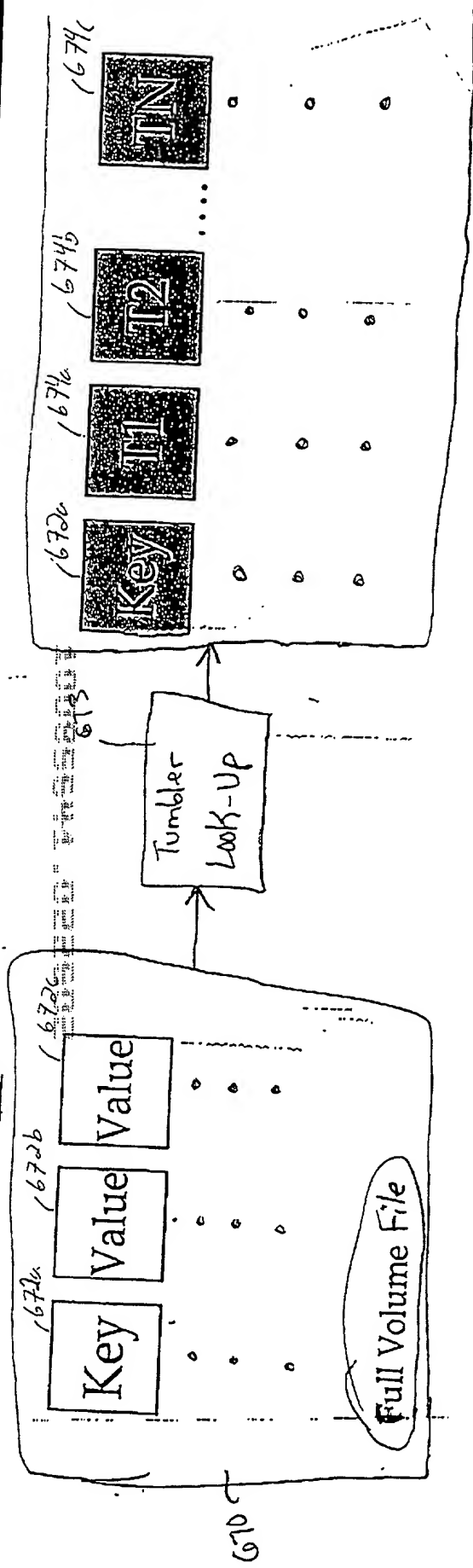


FIG. 6F

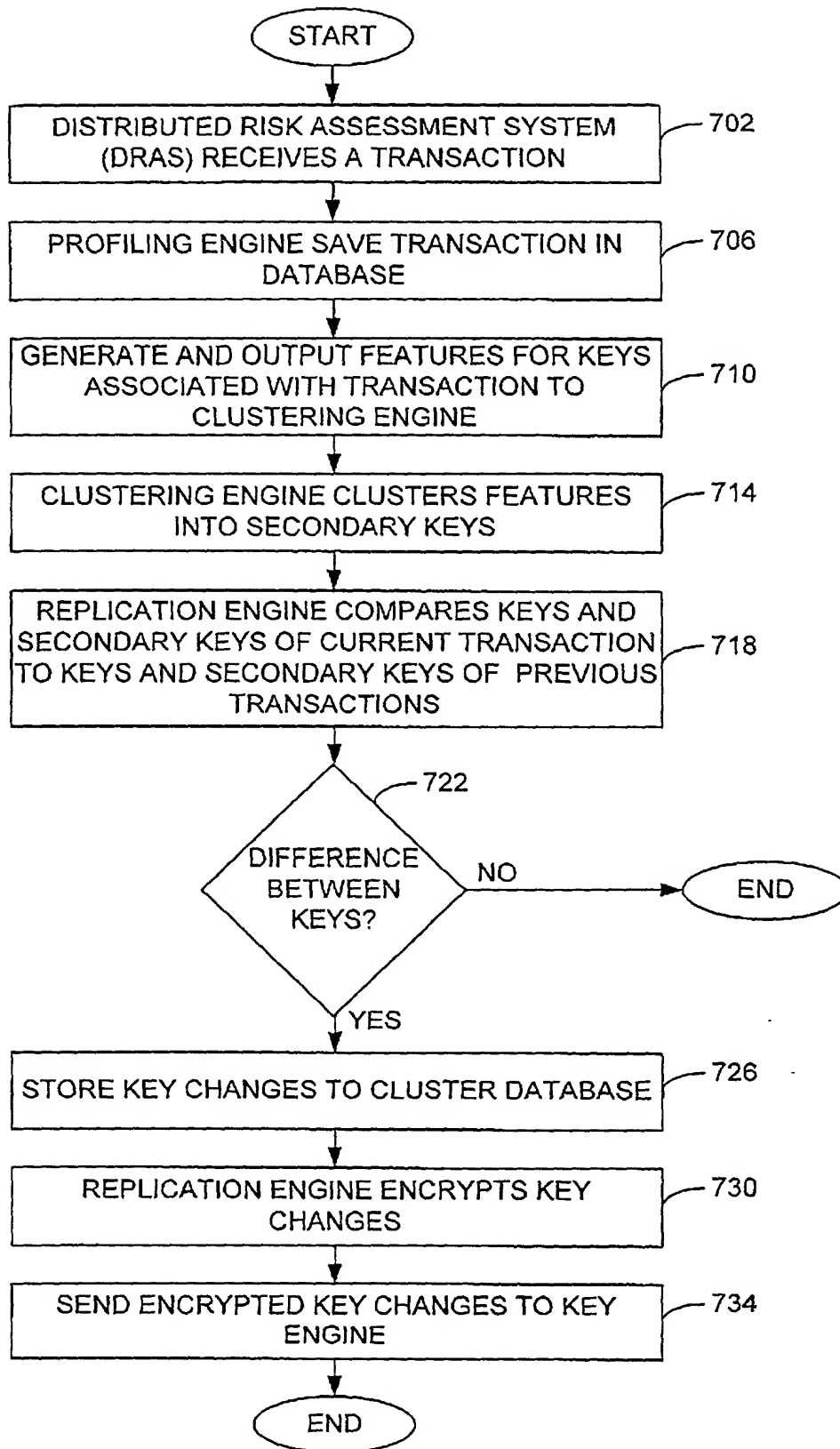


FIG. 7

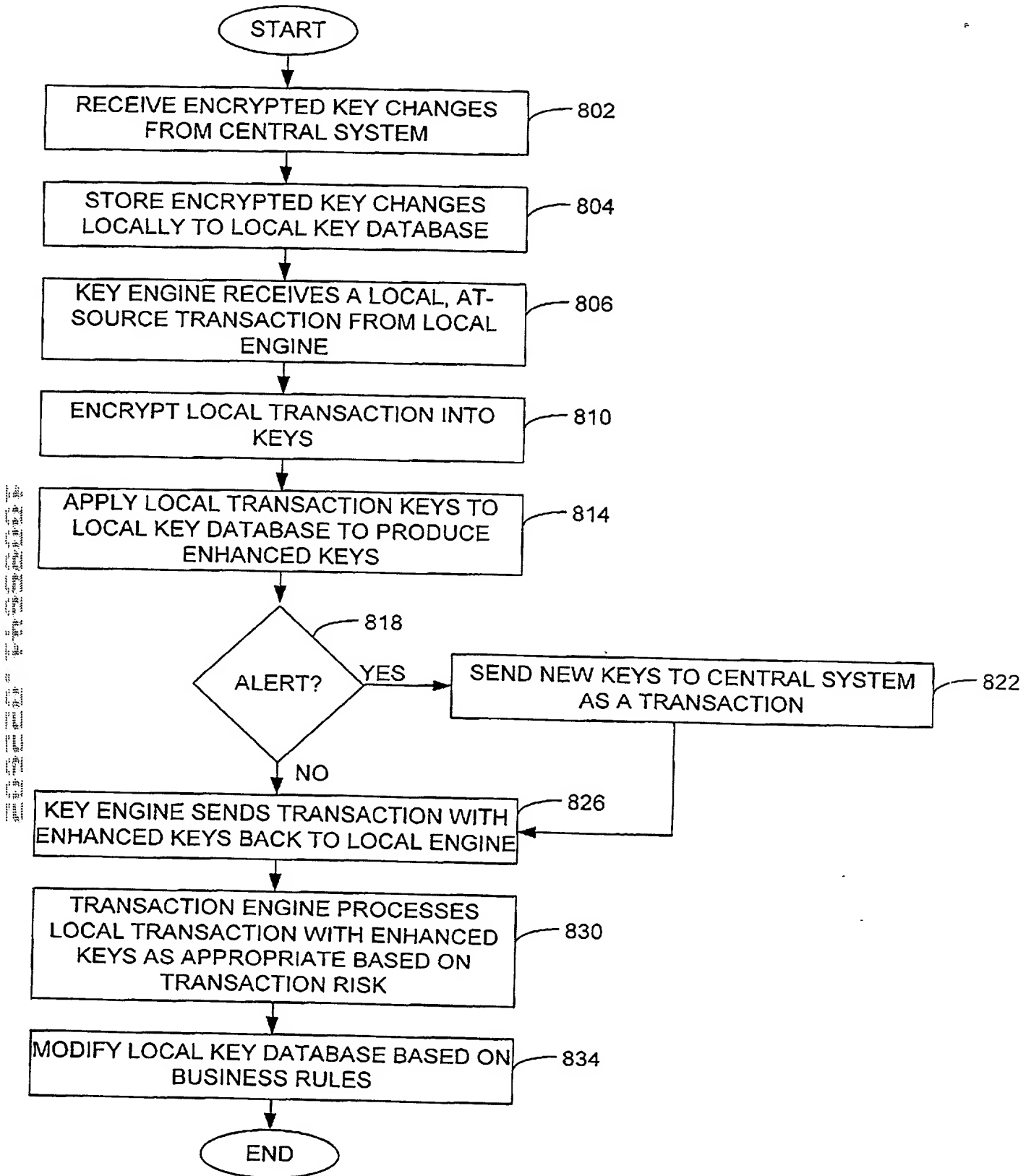
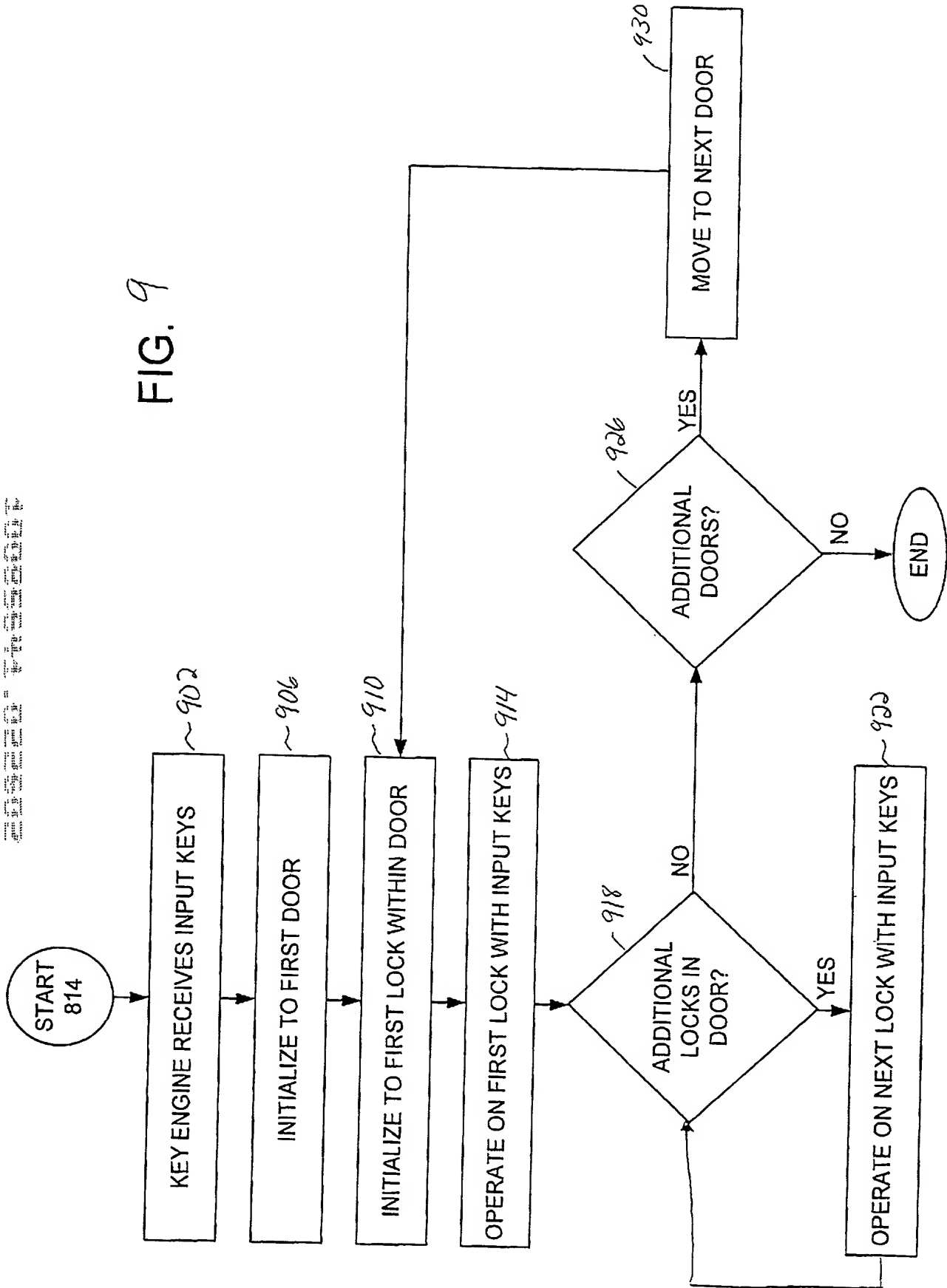


FIG. 8

FIG. 9



140
↓

Profiling Engine

